

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1 1. (Currently Amended): A method for securing ventilation cloth to a screen frame,
2 comprising the steps of:

3 (a) orienting a screen frame in an approximately vertical position, the screen
4 frame having a plurality of segments, each segment having a mounting surface on a face
5 thereof, at least one of said segments having adhesive on the mounting surface thereof;

6 (b) hanging a ventilation cloth across the mounting surface of said one
7 segment;

8 (c) providing adhesive in said at least one of the segments clamping all the
9 segments simultaneously with a plurality of separately positionable clamping arms;

10 (d) inserting the ventilation cloth in the adhesive across a length of said one of
11 the segments.

1 2. (Currently Amended): The method of claim-1, wherein step (c) includes melting
2 the adhesive.

1 3. (Currently Amended): The method of claim-2, wherein:
2 each of the segments has adhesive on the mounting surface thereof;
3 step (b) includes hanging the ventilation cloth across the mounting surface of each
4 segment simultaneously;
5 step (c) includes melting the adhesive on all of the segments; and
6 step (d) includes simultaneously inserting the ventilation cloth in the adhesive
7 substantially across an entire length of each of the segments.

1 4. (Original): The method of claim 1, wherein step (a) includes orienting the frame
2 in a position between 0 and 30 degrees from vertical.

1 5. (Currently Amended): The method of claim 1, wherein step (d) includes
2 simultaneously pushing the screen into the adhesive along substantially across said one
3 side with an elongated insertion member having a length substantially as long as a length
4 of the screen bar segment.

1 6. (Original): The method of claim 1, further comprising the step of clamping the
2 screen frame on four sides simultaneously, before step (b).

1 7. (Currently Amended): The method of claim 6, wherein the frame is pre-bowed
2 outward before the clamping step, and the clamping step includes compressing the frame
3 inward from the outside on all four sides, so that the ventilation cloth is tensioned when
4 the clamping is discontinued.

1 8. (Original): The method of claim 5, further comprising, before step (b), the step of
2 loading the frame into a side of an apparatus in which the insertion is performed.

1 9. (Currently Amended): A method for securing a ventilation cloth to a screen bar
2 segment, comprising the steps of:

- 3 (a) providing a screen bar segment having a mounting surface on a face
4 thereof, the segment having adhesive on the mounting surface;
- 5 (b) spreading the ventilation cloth across the mounting surface of the screen
6 bar segment;
- 7 (c) melting the adhesive;
- 8 (d) inserting the ventilation cloth into the adhesive with an elongated straight
9 insertion member, ~~that extends the insertion member having a length substantially across~~
10 as long as a length of the screen bar segment.

1 10. (Original): The method of claim 9, wherein step (d) is performed by moving the
2 insertion member in a single motion normal to the plane of the ventilation cloth.

1 11. (Original): The method of claim 9, further comprising:
2 applying a release coating to the plurality of elongated insertion member before
3 step (d).

1 12. (Original): The method of claim 9, wherein the screen bar segment is included in
2 a screen frame having at least three segments, the method further comprising orienting
3 the screen frame in an approximately vertical position before step (b).

1 13. (Currently Amended): The method of claim 12, wherein
2 each of the segments has adhesive on the mounting surface thereof;
3 step (b) includes hanging the ventilation cloth across the mounting surface each
4 segment simultaneously;
5 step (c) includes melting the adhesive on all of the segments; and
6 step (d) includes inserting the ventilation cloth in the adhesive substantially across
7 the length of each of the segments simultaneously.

1 14. (Withdrawn): Ventilation cloth insertion apparatus, comprising:
2 a fixture that orients a screen frame in an approximately vertical position, the
3 screen frame having a plurality of segments, each segment having a mounting surface on
4 a face thereof, at least one of said segments having adhesive on the mounting surface
5 thereof; and
6 at least one insertion device that inserts a vertically positioned ventilation cloth in
7 the adhesive substantially across a length of said one of the segments.

1 15. (Withdrawn): The apparatus of claim 14, further comprising a hanger that hangs
2 the ventilation cloth across the mounting surface of said one segment.

1 16. (Withdrawn): The apparatus of claim 14, further comprising a heater that melts
2 the adhesive in said one of the segments.

1 17. (Withdrawn): The apparatus of claim 14, wherein each of the segments has
2 adhesive on the mounting surface thereof; the apparatus further comprising:
3 a hanger that hangs the ventilation cloth across the mounting surface each
4 segment simultaneously; and
5 a heater that melts the adhesive on all of the segments;
6 wherein the apparatus includes at least one insertion apparatus for each respective
7 segment of the frame, for inserting the ventilation cloth in the adhesive across the length
8 of each of the segments.

1 18. (Withdrawn): The apparatus of claim 14, wherein the fixture orients the frame in a
2 position between 0 and 30 degrees from vertical.

1 19. (Withdrawn): The apparatus of claim 14, wherein the insertion device is a band or
2 elongated insertion member extending substantially across the length of the segment.

1 20. (Withdrawn): The apparatus of claim 14, further comprising means for clamping
2 the screen frame on four sides simultaneously.

1 21. (Withdrawn): The apparatus of claim 20, wherein the clamping means includes
2 means for compressing the frame from the outside on all four sides.

1 22. (Withdrawn): The apparatus of claim 20, wherein the clamping means includes at
2 least one clamping device on a side of the apparatus, said at least one clamping device
3 being capable of movement in a direction normal to a plane in which the frame is
4 positioned to allow the frame to be loaded into the apparatus by way of the side on which
5 said at least one clamping device is located.

1 23. (Withdrawn): The apparatus of claim 14, wherein the fixture includes a fixed arm
2 and three movable arms, the movable arms being positionable for clamping frames
3 having multiple sizes between the fixed and movable arms.

1 24. (Withdrawn): The apparatus of claim 23, wherein one of the movable arms is
2 movable in a first direction parallel to a length thereof and movable in a second direction
3 perpendicular to the length thereof.

1 25. (Withdrawn): The apparatus of claim 23, wherein each movable arm is movable
2 within a respective pair of slidable yolks.

1 26. (Withdrawn): The apparatus of claim 23, wherein each arm is positioned
2 substantially at the same height, measured from a plane in which the ventilation cloth
3 lies.

1 27. (Withdrawn): Ventilation cloth insertion apparatus, comprising:
2 a fixture that clamps a screen frame, the screen frame having a plurality of
3 segments, each segment having a mounting surface on a face thereof, at least one of said
4 segments having adhesive on the mounting surface thereof,

5 said fixture having a plurality of clamping arms, said clamping arms being
6 positionable so that each clamping arm clamps a respective side edge of a respective one
7 of the plurality of sides of the screen frame while attaching a ventilation cloth to the
8 screen frame, wherein each of the plurality of clamping arms is positioned at a common
9 height with respect to a plane in which the ventilation cloth is positioned;

10 at least one insertion device that inserts a ventilation cloth in the adhesive
11 substantially across a length of said one of the segments.

1 28. (Withdrawn): The apparatus of claim 27, wherein each clamping arm clamps a
2 respective outside edge of a respective one of the plurality of sides of the frame, the

3 outside edges of the screen frame being the edges of the segments that are furthest from a
4 center of the screen frame.

1 29. (Withdrawn): The apparatus of claim 27, further comprising a heater that melts
2 the adhesive in said one of the segments.

1 30. (Withdrawn): The apparatus of claim 27, wherein :
2 each of the segments has adhesive on the mounting surface thereof;
3 the heater melts the adhesive on all of the segments; and
4 the apparatus includes a plurality of insertion devices, each inserting the
5 ventilation cloth in the adhesive across a length of a respective one of the segments.

1 31. (Withdrawn): The apparatus of claim 27, wherein the apparatus includes four
2 clamping arms forming a rectangle, and three of the four clamping arms are movable
3 with respect to a remaining one of the arms.

1 32. (Withdrawn): The apparatus of claim 31, wherein one of the movable arms is
2 movable in a first direction parallel to a length thereof and movable in a second direction
3 perpendicular to the length thereof.

1 33. (Withdrawn): The apparatus of claim 31, wherein each movable arm is movable
2 within a respective pair of slidable yolk.

1 34. (Withdrawn): The apparatus of claim 27, further comprising an air actuated shield
2 for protecting a portion of the ventilation cloth adjacent to a corner key in at least one
3 corner of the screen frame.

1 35. (Withdrawn): The apparatus of claim 27, wherein at least one clamping arm is
2 located on a side of the apparatus and is capable of movement in a direction normal to a

3 plane in which the frame is positioned, to allow the frame to be loaded into the apparatus
4 by way of the side on which said at least one clamping arm is located.

1 36. (Withdrawn): A cart for transporting a frame, comprising:
2 an L-shaped bracket having a side and a bottom portion;
3 a plurality of clips that hold the frame on the side and bottom portion of the
4 bracket; and
5 a pivotally mounted finger having a first position parallel to the bracket for
6 loading the frame onto the clips and a second position normal to the bracket.

1 37. (Withdrawn): The cart of claim 36, further comprising an actuator, wherein the
2 bracket is mounted to the actuator.

1 38. (Withdrawn): The cart of claim 36, wherein the plurality of clips includes at least
2 two clips on the bottom portion of the bracket.

1 39. (Withdrawn): A method for forming an assembly from screen material and a first
2 frame having a plurality of side members, wherein the screen comes into fixative contact
3 with the adhesive, characterized in that:
4 adhesive is pre-heated on each side member of the first frame; and
5 the screen is pushed using a plurality of pins on each side member of the first
6 frame simultaneously.

1 40. (Withdrawn): The method of claim 39, wherein the frame is pre-heated in an oven
2 to melt the adhesive.

1 41. (Withdrawn): The method of claim 39, further comprising, between the pre-
2 heating and pushing steps, the steps of:
3 (1) placing the first frame on a first support at a first height;
4 (2) clamping the frame; and

5 (3) actuating a second support to support the screen at a second height different from
6 the first height.

1 42. (Withdrawn): The method of claim 41, wherein the frame has four side members,
2 and step includes:

3 (i) clamping the first side member of the frame;
4 (ii) measuring a position of a third side member of the frame opposite the first side
5 member;
6 (iii) automatically positioning an insertion device above the adhesive on the third side
7 member.

1 43. (Withdrawn): The method of claim 41, wherein the frame has four side members,
2 the method further comprising, before the spreading step, the steps of:

3 (1) placing the first and second side members of the frame on first and second fixed
4 frame supports;
5 (2) automatically sliding a movable frame support under the third side member of the
6 frame; and
7 (3) automatically compressing the fourth side member towards the second side
8 member with a movable clamping arm.

1 44. (Withdrawn): The method of claim 43, wherein the frame has an unknown size
2 before step is executed.

1 45. (Withdrawn): The method of claim 39, wherein the frame has four side members,
2 and the pushing step includes:

3 inserting the screen into the first and second side members with first and second
4 fixed location insertion devices;

5 inserting the screen into the third side member with a first movable insertion
6 device; and

7 inserting the screen into the fourth side member with a second movable insertion
8 device that is configured to accommodate the first movable insertion device regardless of
9 the positions of the first and second movable insertion devices.

1 46. (Withdrawn): The method of claim 39, wherein the plurality of pins are mounted
2 on a plurality of arms, at least one of the plurality of arms being movable, the method
3 further comprising moving the at least one movable arm after the pushing step, to form a
4 second screen assembly having a second frame, the second frame having a different size
5 from the first frame.

1 47. (Withdrawn): The method of claim 46, wherein half of the plurality of arms are
2 fixed and half of the plurality of arms are movable, each fixed arm being located opposite
3 a respective movable arm.

1 48. (Withdrawn): The method of claim 39, further comprising the steps of:
2 (c) cooling the adhesive proximate to the pins; and then
3 (d) removing the pins from the adhesive.

1 49. (Withdrawn): The method of claim 39, further comprising the step of cooling the
2 pins before pushing the screen with the pins.

1 50. (Withdrawn): The method of claim 39, further comprising the step of pre-cutting
2 the screen material to approximately a final installed size before performing the pushing
3 step.